

Draft Stormwater Management Plan
Town of Maiden
NCS000481

Rev. 12/17/2020

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PART 1: INTRODUCTION

The purpose of this Stormwater Management Plan (SWMP) is to establish and define the means by which the Town of Maiden will comply with its National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit and the applicable provisions of the Clean Water Act to meet the federal standard of reducing pollutants in stormwater runoff to the maximum extent practicable.

This SWMP identifies the specific elements and minimum measures that the Town of Maiden will develop, implement, enforce, evaluate and report to the North Carolina Department of Environmental Quality (NCDEQ) Division of Energy, Minerals and Land Resources (DEMLR) in order to comply with the MS4 Permit number NCS000481, as issued by NCDEQ. This permit covers activities associated with the discharge of stormwater from the MS4 as owned and operated by the Town of Maiden and located within the corporate limits of the Town of Maiden.

In preparing this SWMP, the Town of Maiden has evaluated its MS4 and the permit requirements to develop a comprehensive 5-year SWMP that will meet the community's needs, address local water quality issues and provide the minimum measures necessary to comply with the permit. The SWMP will be evaluated and updated annually to ensure that the elements and minimum measures it contains continue to adequately provide for permit compliance and the community's needs.

Once the SWMP is approved by NCDEQ, all provisions contained and referenced in this SWMP, along with any approved modifications of the SWMP, are incorporated by reference into the permit and become enforceable parts of the permit.

PART 2: CERTIFICATION

By my signature below I hereby certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

I am also aware that the contents of this document shall become an enforceable part of the NPDES MS4 Permit, and that both the Division and the Environmental Protection Agency have NPDES MS4 Permit compliance and enforcement authority.

- ☐ I am a ranking elected official.
- ☐ I am a principal executive officer for the permitted MS4.
- ☐ I am a duly authorized representative for the permitted MS4 and have attached the authorization made in writing by a principal executive officer or ranking elected official which specifies me as (*check one*):
 - ☐ A specific individual having overall responsibility for stormwater matters.
 - ☐ A specific position having overall responsibility for stormwater matters.

<i>Signature:</i>	
<i>Print Name:</i>	<i>Todd Herms</i>
<i>Title:</i>	<i>Town Manager</i>
Signed this <u>29</u> day of December 2020 .	

PART 3: MS4 INFORMATION

3.1 Permitted MS4 Area

This SWMP applies throughout the corporate limits of the Town of Maiden, including all regulated activities associated with the discharge of stormwater from the MS4. The map below shows the corporate limits of Town of Maiden as of the date of this document.

See Appendix A

3.2 Existing MS4 Mapping

The current MS4 mapping includes stormwater pipes, outfalls, inlets, and basins that upon clicking show the direction, sizes, and material. This map information is collected and held in the same software that shows our sewer, water, and electric infrastructure and is not made publicly available.

Table 1: Summary of MS4 Mapping

Percent of MS4 Area Mapped	80	%
No. of Major Outfalls* Mapped	7	total

**An outfall is a point where the MS4 discharges from a pipe or other conveyance (e.g. a ditch) directly into surface waters. Major outfalls are required to be mapped to meet permit requirements. A major outfall is a 36-inch diameter pipe or discharge from a drainage area > 50-acres; and for industrial zoned areas a 12-inch diameter pipe or a drainage area \geq 2-acres.*

3.3 Receiving Waters

The Town of Maiden MS4 is located within the Catawba River Basin and discharges directly into receiving waters as listed in Table 2 below. Applicable water quality standards listed below are compiled from the following NCDEQ sources:

- [Waterbody Classification Map](#)
- [Impaired Waters and TMDL Map](#)
- Most recent NCDEQ Final [303\(d\) List](#)

Table 2: Summary of MS4 Receiving Waters

Receiving Water Name	Stream Index / AU Number	Water Quality Classification	303(d) Listed Parameter(s) of Interest
Clarks Creek (Shooks Lake)	11-129-5-(0.3)b	C	303 (d) (IR=5): Ecological/Biological Integrity Benthos
Maiden Creek	11-129-5-7-2-(3)	C	303 (d) (IR=5): Ecological/Biological Integrity Benthos

3.4 MS4 Interconnection

The Town of Maiden MS4 is not interconnected with another regulated MS4 and directly discharges to the receiving waters as listed in Table 2 above.

3.5 Total Maximum Daily Loads (TMDLs)

The TMDL(s) listed in Table 3 below have been approved within the MS4 area, as determined by the map and list provided on the [NCDEQ Modeling & Assessment Unit web page](#). The table also indicates whether the approved TMDL has a specific stormwater Waste Load Allocation (WLA) for any watershed directly receiving discharges from the permitted MS4, and whether a Water Quality Recovery Program has been implemented to address the WLA.

Table 3: Summary of Approved TMDLs

Water Body Name	TMDL Pollutant(s) of Concern	Stormwater Waste Load Allocation (Y/N)	Water Quality Recovery Program (Y/N)
Clarks Creek	Fecal Coliform (TMDL Doc. 11/11/2002)	Y	N
Maiden Creek	Not listed*	N	N

* Not listed on Draft and Approved TMDLs on NCDEQs website
(<https://deq.nc.gov/about/divisions/water-resources/planning/modeling-assessment/tmdls/draft->

and-approved-tmdls#Catawba) but appears on map TMDL Watersheds to be included in the overall TMDL watershed for Clarks Creek seen here (<https://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=bc125c8b5ccf4110b538db1188731690>)

A waste load allocation is discussed in the TMDL document, the Town of Maiden will continue to review updated reports from the NCDEQ regarding the TMDL for Maiden Creek and WWTP requirements for discharge.

3.6 Endangered and Threatened Species and Critical Habitat

Significant populations of threatened or endangered species and/or critical habitat are identified within the regulated MS4 urbanized area, as determined by a review of the [Endangered and Threatened Species and Species of Concern by County for North Carolina Map](#) and [Listed species believe to or known to occur in North Carolina map](#) as provided by the [U.S. Fish and Wildlife Service](#). Of those species listed, Table 4 summarizes the species that may be significantly impacted by the quality of surface waters within their habitat.

Table 4: Summary of Federally Listed Species/Habitat Impacted by Surface Water Quality

Scientific Name	Common name	Species Group	Federal Listing Status
<i>Haliaeetus leucocephalus</i>	Bald Eagle	Animal/Vertebrate	BGPA
<i>Myotis septentrionalis</i>	Northern long-eared bat	Animal/Vertebrate	T
<i>Tsuga caroliniana</i>	Carolina Hemlock	Vascular Plant	ARS
<i>Hexastylis naniflora</i>	Dwarf-flowered heartleaf	Vascular Plant	T
<i>Helianthus schweinitzii</i>	Schweinitz's sunflower	Vascular Plant	E

3.7 Industrial Facility Discharges

The Town of Maiden MS4 jurisdictional area includes the following industrial facilities which hold NPDES Industrial Stormwater Permits, as determined from the NCDEQ [Active NPDES Stormwater Permit List](#) and/or [Active Stormwater Permits Map](#).

Table 5: NPDES Stormwater Permitted Industrial Facilities

Permit Number	Facility Name
NCG080937	Town of Maiden Public Works

NCG170125	Carolina Mills Incorporated-Plant 8
NCG170414	South Fork Industries - Maiden Plant
NCG180072	Ethan Allen Operations, Inc.
NCG020286	Maiden Quarry
NCS000481	Maiden Town-Small MS4
NCG030642	GKN Driveline Newton LLC

3.8 Non-Stormwater Discharges

The water quality impacts of non-stormwater discharges have been evaluated by the Town of Maiden as summarized in Table 6 below. The unpermitted non-stormwater flows listed as incidental do not significantly impact water quality. The Town of Maiden has evaluated residential and charity car washing and street washing for possible significant water quality impacts.

Street washing discharges are addressed under the Pavement Management Program in Part 10 of this SWMP. The Division has not required that other non-stormwater flows be specifically controlled by the Town of Maiden.

Wash water associated with car washing that does not contain detergents or does not discharge directly into the MS4 is considered incidental. However, these types of non-stormwater discharges that do contain detergents have been evaluated by the Town of Maiden to determine whether they may significantly impact water quality.

In coordination with the Western Piedmont Council of Government, the message of stormwater pollutants and various types of stormwater quality impacts are discussed with the public.

Table 6: Non-Stormwater Discharges

Non-Stormwater Discharge	Water Quality Impacts
Water line and fire hydrant flushing	Incidental
Landscape irrigation	Incidental
Diverted stream flows	Incidental
Rising groundwater	Incidental
Uncontaminated groundwater infiltration	Incidental
Uncontaminated pumped groundwater	Incidental
Uncontaminated potable water sources	Incidental
Foundation drains	Incidental

Air conditioning condensate	Incidental
Irrigation waters	Incidental
Springs	Incidental
Water from crawl space pumps	Incidental
Footing drains	Incidental
Lawn watering	Incidental
Residential and charity car washing	Possible
Flows from riparian habitats and wetlands	Incidental
Dechlorinated swimming pool discharges	Incidental
Street wash water	Possible
Flows from firefighting activities	Incidental

3.9 Target Pollutants and Sources

In addition to those target pollutants identified above, the Town of Maiden is aware of other significant water quality issues within the permitted MS4 area. These include grass clippings thrown into the road. Based on several complaints and concerns raised by our Street Department, grass clippings and yard debris in the road can cause issues with storm drains being able to handle stormwater. Additionally, litter can contribute negatively to stormwater and the environment and is always an aspect of keeping streams clean that needs to be discussed with audiences.

Table 7 below summarizes the water quality pollutants identified throughout Part 3 of this SWMP, the likely activities/sources/targeted audiences attributed to each pollutant, and identifies the associated SWMP program(s) that address each. In addition, the Town of Maiden has evaluated schools, homeowners and businesses as target audiences that are likely to have significant stormwater impacts.

Table 7: Summary of Target Pollutants and Sources

Target Pollutant(s)	Likely Source(s)/Target Audience(s)	SWMP Program Addressing Target Pollutant(s)/Audience(s)
Litter & Clippings	<i>Residents, Businesses, Schools</i>	<i>Public Education & Outreach</i>
Sediment	Residents, Businesses, Schools	Public Education & Outreach
Illicit Discharges	Residents, Businesses, Schools	Public Education & Outreach
Drain Dumping	Residents, Businesses, Schools	Public Education & Outreach

PART 4: STORMWATER MANAGEMENT PROGRAM ADMINISTRATION

4.1 Organizational Structure

The Town Manager is over three departments that assist in the overall implementation of the stormwater program. The Planning Department serves as the stormwater administrator and oversees several aspects of the stormwater program. The Public Works Department, primarily the Street Department assist the program through recognizing issues throughout the MS4 including cleaning stormdrains and inlets, collecting leaves and brush and overseeing the Public Works facility. Lastly, the Fire Department is most frequently called in the event of a spill response and work closely with the Catawba County Emergency Management to ensure cleanup.

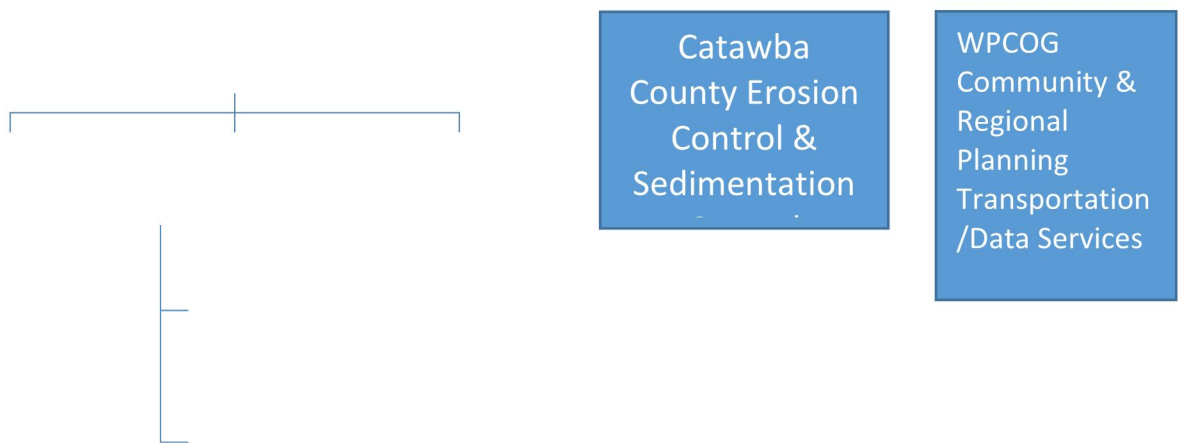


Table 8: Summary of Responsible Parties

SWMP Component	Responsible Position	Staff Name	Department
Stormwater Program Administration	Planning Director	Blake Wright	Planning
SWMP Management	Planning Director	Blake Wright	Planning
Public Education & Outreach*	Planner	John E. Wear	WPCOG Community & Regional Planning Transportation/Data Services

Public Involvement & Participation	Planning Director	Blake Wright	Planning
Illicit Discharge Detection & Elimination	Planning Director	Blake Wright	Planning
Construction Site Runoff Control+	Water Resources Engineer	Toni Norton	Catawba County Erosion Control & Sedimentation Control
Post-Construction Stormwater Management	Planning Director	Blake Wright	Planning
Pollution Prevention/Good Housekeeping for Municipal Operations	Planning Director	Blake Wright	Planning
Municipal Facilities Operation & Maintenance Program	Planning Director	Blake Wright	Planning
Spill Response Program	Fire Chief	Tracy Caldwell	Fire Department
MS4 Operation & Maintenance Program	Planning Director	Blake Wright	Planning
Municipal SCM Operation & Maintenance Program	Planning Director	Blake Wright	Planning
Pesticide, Herbicide & Fertilizer Management Program	Street Supervisor	Micah Beal	Public Works
Vehicle & Equipment Cleaning Program	Garage Mechanic	Dennis Leonard	Public Works
Pavement Management Program	Street Supervisor	Micah Beal	Public Works

Total Maximum Daily Load (TMDL) Requirements	Planning Director	Blake Wright	Planning
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*Public Education and Outreach are administered by the Western Piedmont Council of Governments WPCOG, but fees are taken from the Planning Budget.

^ Construction Site Runoff Control is provided by Catawba County and no fees are charged.

4.2 Program Funding and Budget

In accordance with the issued permit, the Town of Maiden shall maintain adequate funding and staffing to implement and manage the provisions of the SWMP and comply with the requirements of the NPDES MS4 Permit. The budget includes the permit administering and compliance fee, which is billed by the Division annually.

Funding Mechanisms for the stormwater program: The stormwater program is not supported by a revenue source such as impervious surface rate or other such fees. Funding for the stormwater program is provided solely by the Town of Maiden's General Fund. The total budget is \$31,571. This includes funding for the Western Piedmont Council of Governments WPCOG GIS maintenance service that is used to map utilities (stormwater infrastructure, but also water, sewer, and electric) Contract for WPCOG Public Education and Outreach aspect, NPDES MS4 Permit, and a portion of wages from Town employees involved in implementing the stormwater program. This is an increase from \$3,400 previously shown as the budget in the annual report. This funding indicates an accurate depiction of the Town's expenditure on the stormwater program and is sufficient to implement this SWMP.

4.3 Shared Responsibility

The Town of Maiden will share the responsibility to implement the following minimum control measures, which are at least as stringent as the corresponding NPDES MS4 Permit requirement. The Town of Maiden remains responsible for compliance if the other entity fails to perform the permit obligation, and may be subject to enforcement action if neither the Town of Maiden nor

the other entity fully performs the permit obligation. Table 9 below summarizes who will be implementing the component, what the component program is called, the specific SWMP BMP or permit requirement that is being met by the shared responsibility, and whether or not a legal agreement to share responsibility is in place.

Table 9: Shared Responsibilities

SWMP BMP or Permit Requirement	Implementing Entity & Program Name	Legal Agreement (Y/N)
Permit Section 3.5	Catawba County Erosion and Sedimentation Control	Y
Permit Section 3.2	WPCOG Community & Regional Planning Transportation/Data Services	Y

4.4 Co-Permittees

There are no other entities applying for co-permittee status under the NPDES MS4 permit number NCS000481 for the Town of Maiden. Table 10 summarizes contact information for each co-permittee.

Table 10: Co-Permittee Contact Information

Co-Permittee MS4 Name	Contact Person	Phone & E-Mail	Interlocal Agreement (Y/N)
N/A	N/A	N/A	N/A

4.5 Measurable Goals for Program Administration

The Town of Maiden will manage and report the following Best Management Practices (BMPs) for the administration of the Stormwater Management Program.

Table 11: Program Administration BMPs				
Permit Ref.	2.1.2 and Part 4: Annual Self-Assessment Measures to evaluate the performance and effectiveness of the SWMP program components at least annually. Results shall be used by the permittee to modify the program components as necessary to accomplish the intent of the Stormwater Program. The self-assessment reporting period is the fiscal year (July 1 – June 30).			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
1.	Annual Self-Assessment			
	Perform an annual evaluation of SWMP implementation, suitability of SWMP commitments and any proposed changes to the SWMP utilizing the NCDEQ Annual Self-Assessment Template.	1. Prepare, certify and submit the Annual Self-Assessment to NCDEQ prior to August 31 each year.	1. Annually for Permit Years 1 – 4	1. Annual Self-Assessment received by NCDEQ no later than August 31 each year.
Permit Ref.	1.6: Permit Renewal Application Measures to submit a permit renewal application no later than 180 days prior to the expiration date of the NPDES MS4 permit.			
	A	B	C	D

Table 11: Program Administration BMPs

BMP No.	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
2.	Permit Renewal Application			
	Audit stormwater program implementation for compliance with the permit and approved SWMP, and utilize the results to prepare and submit a permit renewal application package.	1. Participate in an NPDES MS4 Permit Compliance Audit, as scheduled and performed by EPA or NCDEQ.	1. TBD – Typically Permit Year 4	1. N/A
		2. Self-audit and document any stormwater program components not audited by EPA or NCDEQ utilizing the DEQ Audit Template.	2. Permit Year 5	2. Submit Self-Audit to DEMLR (required component of permit renewal application package).
		3. Certify and submit the stormwater permit renewal application (NOI, Self-Audit, and Draft SWMP for the next 5-year permit cycle).	3. Permit Year 5	3. Permit renewal application package received by DEQ at least 180 days prior to permit expiration.

PART 5: PUBLIC EDUCATION AND OUTREACH PROGRAM

The Town of Maiden will implement a Public Education and Outreach Program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and steps the public can take to reduce pollutants in storm water runoff.

The target audiences and identified pollutants listed in Part 3.9 of this SWMP, which will be addressed by the Public Education and Outreach Program, are summarized in Table 12 below. In addition, the Town of Maiden is required to inform businesses and the general public of the hazards associated with illicit discharges, illegal dumping and improper disposal of waste.

Table 12: Summary of Target Pollutants & Audiences

Target Pollutants/Sources	Target Audience(s)
Illicit Discharges	General Public, Businesses, Municipal Employees
Illegal Dumping	General Public, Businesses, Municipal Employees
Improper Disposal of Waste	General Public, Businesses, Municipal Employees

The Town of Maiden will manage, implement and report the following public education and outreach BMPs.

Table 13: Public Education and Outreach BMPs				
Permit Ref.	3.2.2 and 3.2.4: Outreach to Targeted Audiences Measures to identify the specific elements and implementation of a Public Education and Outreach Program to share educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and how the public can reduce pollutants in stormwater runoff. The permittee shall provide educational information to identified target audiences on pollutants/sources identified in table 12 above, and shall document the extent of exposure of each media, event or activity, including those elements implemented locally or through a cooperative agreement.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric

Table 13: Public Education and Outreach BMPs

3.	Stormwater Fliers			
	Stormwater fliers will be distributed to Town residences, municipal employees, businesses, and industrial facilities through stormwater events. Five topics will be addressed over the term of the permit; general stormwater awareness, illicit discharges, illegal dumping, chemicals and proper disposal of waste.	1. Develop and distribute fliers at Town events to create stormwater awareness.	1. Permit Year 1	1.-5. Number of flyers distributed at events..
		2. Develop and distribute fliers for illicit discharges.	2. Permit Year 2	
		3. Develop and distribute fliers for illegal dumping.	3. Permit Year 3	
		4. Develop and distribute fliers for chemical awareness.	4. Permit Year 4	
		5. Develop and distribute fliers for proper waste disposal.	5. Permit Year 5	
4.	Public Event Outreach			
	Provide stormwater educational information to the general public at community events.	1. Staff will have a booth at the annual Maiden Fall Fest to disperse stormwater outreach materials/awareness through the use of interactive educational games and activities.	1. Annually Permit Years 1-5	1. Number of attendees at the outreach booth during the festival.

Table 13: Public Education and Outreach BMPs

5.	Student/Teacher Outreach			
	Provide educational information to students and teachers through classroom, workshop, and hands-on activities related to stormwater BMPs.	1. Staff will provide in class instruction and/or stormwater educational activities to students that attend Maiden Middle School.	1. Annually Permit Years 1-5	1. Number of classes and/or activities provided; Number of students present at these classes/activities.
		2. Staff will conduct stormwater related workshops with teachers.	2. Annually Permit Years 1-5	2. Number of teacher workshops provided; Number of teachers who attended.
6.	Printed Materials			
	Staff will design and distribute new printed materials for target audiences to aid stormwater education	1. Staff will create printed material for local government distribution addressing stormwater best practices.	1. Permit Year 1	1. Were new outreach materials created? Yes, No; Status.
		2. Staff will distribute printed materials at events, school presentations, and have them on display for public acquisition in Government buildings. The flyers will also be hosted on the WPCOG website to enable digital access to this resource.	2. See BMP 3	2. See BMP 3

Table 13: Public Education and Outreach BMPs

7.	Annual Water Quality Conference			
	Sponsor the Western Piedmont Council of Governments and Lenoir Rhyne University's Annual Water Quality Conference to provide outreach and public participation. Staff will conduct the annual regional conference for continued education targeting local government officials, municipal staff, local businesses, educators, and the general public.	1. Provide one presentation about one of the six NPDES Minimum Control Measures at each annual conference. A different MCM will be presented on each year.	1. Annually Permit Years 1-5	1. Number of attendees at conference
8.	Evaluate Pollutants Sources and Audiences			
	Evaluate the target pollutants (litter, sediment, gray water, fats, oils, grease, animal operations, underground storage tanks, super fund sites, chemicals, illicit discharges, illegal dumping, improper disposal of waste), sources, and associated target audiences (residents, businesses, schools, construction activity, commercial, farms, industrial, development community, general public, and municipal employees) likely to have significant	1. Evaluate following target pollutants: litter, sediment, gray water, fats, oils, grease, animal operations, underground storage tanks, super fund sites, chemicals, illicit discharges, illegal dumping and improper disposal of waste.	1. Annually Permit Years 1-5	1. - 2. Number of target pollutant violations.

Table 13: Public Education and Outreach BMPs

	stormwater impacts and why they were selected. This evaluation is looking at target audiences that are creating pollution to allow the Town to correctly focus education efforts in those area.	2. Evaluate the following target audiences: residents, businesses, schools, construction activity, commercial, farms, industrial, development community, general public and municipal employees.	2. Annually Permit Years 1-5	1. - 2. Number of target pollutant violations.
9.	Evaluate Public Education and Outreach BMPs.			
	Evaluate the successful components of outreach through interest and feedback.	1. Create and administer an annual survey to be housed on the WPCOG stormwater website once a year, open to feedback for a total of 4 weeks.	1. Annually Permit Years 1-5	1. Number of surveys completed.

Table 13: Public Education and Outreach BMPs

Permit Ref.	2.1.7, 3.2.3 and 3.6.5(c): Web Site Measures to provide a web site designed to convey the program's message(s) and provide online materials including ordinances, or other regulatory mechanisms, or a list identifying the ordinances or other regulatory mechanisms, providing the legal authority necessary to implement and enforce the requirements of the permit and SWMP. The web page shall also provide developers with all relevant post-construction requirements, design standards, checklists and/or other materials.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
10.	Website			
	Maintain the already established website designed to convey the program's message. The Town webpage will convey the importance of water quality and a link to the WPCOG Stormwater webpage will be placed on the Town's website. The WPCOG Stormwater webpage will provide educational resource links, list the compliant procedures, stormwater regulations, stormwater permit information and good housekeeping information.	1. Maintain and update stormwater program information on the existing municipal website.	1. Annually Permit Years 1-5	1. Did the website need revisions: Y/N
		2. WPCOG staff will maintain and update the WPCOG stormwater web page by: posting the MS4 Annual Self-Assessment, verifying all links and contact information are current/active, posting the current year fliers. The municipal stormwater webpage will also have the current SWMP, stormwater ordinance, and annual assessment posted	2. Annually Permit Years 1-5	2. Was annual self-assessment uploaded to website? Yes, no; Status; Did links and/or contact information need to be updated? Yes, No; Status; Were new/current fliers added to site? Yes, No; Status.
		3. Set a hit counter in order to monitor engagement.	3. Annually Permit Years 1-5	3. Report the number of hits.

Table 13: Public Education and Outreach BMPs

11.	Public Education and Outreach BMPs			
	Provide educational information to municipal employees, businesses, citizens and schools about the hazards associated with illicit discharges, illegal dumping, and improper disposal of waste.	1. Train municipal employees in illicit discharge detection and elimination.	2. Annual	3. Number of trainings held, Number of personnel trained.
		2. Distribute material (generated from BMP 3) to target audiences (municipal employees, schools, businesses, and citizens).	2. See BMP 3	2. See BMP 3
		3. Provide education during the enforcement process.	3. Continuously, Permit Years 1-5	3. Number of citizen interactions during enforcement.
Permit Ref.	3.2.5: Stormwater Hotline Measures for a stormwater hotline/helpline for the purpose of public education and outreach.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
12.	Stormwater Education Hotline Contact			
	This hotline will function as a way for citizens to contact the Town to report illicit discharges, stormwater/post construction issues, outreach questions and concerns, and MS4 related concerns.	1. Establish a hotline number for stormwater complaints and information.	1. Permit Year 1	1. Was hotline established; Yes, No; Date of establishment.
		2. Identify specific staff members who will serve as hotline contacts.	2. Permit Year 1	2. Was staff member identified; Yes or No.

Table 13: Public Education and Outreach BMPs

		3. Record number and type of complaints, concerns and information related to each call. Purpose of the call, 'type'/measure the call was about, date it occurred, and municipality of the caller will be recorded.	3. Continuously. Permit Years 1-5	3. Number of hotline phone calls received by type/purpose of call.
		4. Train stormwater hotline staff in general stormwater awareness, complaint call protocols and appropriate contacts for referral and typical stormwater issues.	4. Annually, Permit Years 1-5	4. Did hotline staff receive training? Y/N
		5. Publicize contact information on the Town and WPCOG Stormwater webpages.	5. Continuously Permit Years 1-5	5. Number of hotline calls received overall.

PART 6: PUBLIC INVOLVEMENT AND PARTICIPATION PROGRAM

This SWMP identifies the minimum elements and implementation of a Public Involvement and Participation Program that complies with applicable State, Tribal and local public notice requirements. The Town of Maiden will manage, implement and report the following public involvement and participation BMPs.

Table 14: Public Involvement and Participation BMPs				
Permit Ref.	3.3.1: Public Input Mechanisms for public involvement that provide for input on stormwater issues and the stormwater program.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
13.	Western Piedmont Water Quality Conference			
	Hold Western Piedmont Water Quality Conference for exchange of ideas reading current water quality issues.	1. See BMP 7	1. See BMP 7	1. See BMP 7
14.	Local Stormwater Meeting			
	Hold annual local meeting regarding stormwater to discuss MS4 program.	1. Provide public notice for meeting	1. Permit Year 3-5	1. Event Published: Y/N
		2.Develop materials to provide about stormwater program	2. Permit Year 3-5	2. Materials Developed: Y/N
		3. Hold meeting regarding stormwater to educate about MS4 program	3. Permit Year 3-5	3. Report meeting date.

Table 14: Public Involvement and Participation BMPs

15.	Social Media Outreach			
	Utilize the existing Town of Maiden Facebook page to promote stormwater events, projects, outreach/general stormwater awareness, and stormwater programs. This will be used as an outreach tool to provide exposure to a larger audience and encourage engagement from the general public.	1. Utilize the existing Town of Maiden Facebook page to promote stormwater events, projects, outreach/general stormwater awareness, and stormwater programs. This will be used as an outreach tool to provide exposure to a larger audience and encourage engagement from the general public.	1. Continuously Permit Years 1-5	1. Total Number of posts on the Town of Maiden Facebook page related to the stormwater program.
16.	Water Resources Committee			
	Provide a mechanism for public input and participation via regional meetings on stormwater issues and the stormwater program. Typically, this committee is hosted by the WPCOG once a quarter. This committee also encourages municipal interconnectivity regarding water quality within the region.	1. Participate in quarterly Water Resource Committee meetings, which are open to the public, for discussion of water quality issues within the region. Topics discussed will be recorded for annual reporting.	1. Quarterly Meetings	1. Number of attendees at each meeting.
Permit Ref.	3.3.2: Volunteer Opportunities Measures to provide volunteer opportunities designed to promote ongoing citizen participation.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric

Table 14: Public Involvement and Participation BMPs

17.	Litter Clean-up			
	Explore partnership with Keep Catawba County Beautiful (an organization dedicated to limiting litter	1. Incorporate opportunities with executive director to reduce litter or litter clean up events	1. Permit Year 1	1. Dates identified: Y/Ncuss
		2. Identify location for litter clean up or tarp distribution	2. Permit Year 2	2. Locations identified: Y/N
		3. Organize litter cleanup event or tarp distribution	3. Permit Year 3	3. Report Date

PART 7: ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM

The Town of Maiden will develop, manage, implement, document, report and enforce an Illicit Discharge Detection and Elimination Program which shall, at a minimum, include the following illicit discharge detection and elimination BMPs.

Table 15: Illicit Discharge Detection and Elimination BMPs

Permit Ref.	3.4.1: MS4 Map Measures to develop, update and maintain a municipal storm sewer system map including stormwater conveyances, flow direction, major outfalls and waters of the United States receiving stormwater discharges.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
18.	Major Outfalls			
	Develop, update and maintain a municipal storm sewer system map including major outfalls	1. Verify map location of existing seven outfalls associated with municipal facilities	1. Permit Year 1	1. Location of seven municipal major outfalls mapped: Y/N
		2. Map major outfalls along West and East Main Street and 1 block to North and South with flow directions	2. Permit Year 2	2. Location of major outfalls in area mapped: Y/N and total number mapped
		3. Map major outfalls along Elementary School, Middle School, and High School with flow directions	3. Permit Year 3	3. Location of major outfalls in area mapped: Y/N and total number mapped
		4. Map major outfalls along N and S Carolina Ave with flow directions	4. Permit Year 4	4. Location of major outfalls in area mapped: Y/N and total number mapped
		5. Map major outfalls along Providence Mill Rd and Island Ford Rd. and remaining streets with flow directions	5. Permit Year 5	5. Location of major outfalls in area mapped: Y/N and total number mapped
		6. Add receiving waters to map	6. Permit Year 5	6. Map updated: Y/N
		7. When new conveyances and outfalls are located or constructed add them to the map.	7. Annually, once Permit Year 1-5 have been completed	7. New conveyances and outfalls added: Y/N, Not Applicable

Table 15: Illicit Discharge Detection and Elimination BMPs

19.	Conveyances Develop, update and maintain a municipal storm sewer system map including conveyances	1. Incorporate methods with WPCOG to differentiate pipes from conveyances on mapping system to eliminate confusion with existing pipes	1. Permit Year 1	1. Change to software completed: Y/N
		2. Map conveyances from Municipal Major outfalls	2. Permit Year 2	2. Number of conveyances mapped
		3. Map conveyances from Elementary School, Middle School, and High School	3. Permit Year 3	3. Number of conveyances mapped
		4. Map along N and S Carolina Ave, Providence Mill Rd and Island Ford Rd. and remaining streets.	4. Permit Year 4	4. Number of conveyances mapped.
Permit Ref.	3.4.2: Regulatory Mechanism Measures to provide an IDDE ordinance or other regulatory mechanism that provides legal authority to prohibit, detect, and eliminate illicit connections and discharges, illegal dumping and spills into the MS4, including enforcement procedures and actions.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
20.	Ordinance			
	Determine updates needed to existing IDDE ordinance (Chapter 17 Appendix B. Maiden has the legal authority to enforce IDDE ordinance.	1. Review existing IDDE ordinance and review penalties. Update and Adopt if revision is required.	1. Permit Year 1	1. Ordinance adopted: Y/N

Table 15: Illicit Discharge Detection and Elimination BMPs

Permit Ref.	3.4.3: IDDE Plan Measures to maintain and implement a written IDDE Plan to detect and address illicit discharges, illegal dumping and any non-stormwater discharges identified as significant contributors of pollutants to the MS4. The plan shall provide standard procedures and documentation to: <ul style="list-style-type: none"> a) Locate priority areas likely to have illicit discharges, b) Conduct routine dry weather outfall inspections, c) Identify illicit discharges and trace sources, d) Eliminate the source(s) of an illicit discharge, and e) Evaluate and assess the IDDE Program. 			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
21.	Implement IDDE Program/ Plan			
	Establish IDDE Plan	1. Develop written IDDE Plan/Program to detail the process for identifying and processing illicit discharges, dumping, priority areas, outfall inspection frequency and items. Additionally, the plan will provide standards for eliminating sources of discharges as well as continual assessments of the IDDE program.	1. Permit Year 1	1. Status: Yes orNo
		2. Submit to DEQ for approval	2. Permit Year 1	2. Status submitted: Y/N and Date
		3. Obtain approval from DEQ	3. Permit Year 1	3. Approval obtained: Y/N and Date
		4. Adopt Plan	4. Permit Year 1	4. Plan Adopted: Y/N
		4. Enforce the IDDE Plan	4. Permit Year; Continuous after development.	4. Number of IDDE complaints received and resolved.
22.	Locate Priority Areas			
	Determine priority areas for illicit discharges	1. Map areas with high pollution risk near outfalls.	1. Permit Year 1	1. Number and location of each priority area determined.

Table 15: Illicit Discharge Detection and Elimination BMPs

		2. Record frequent illicit discharges on map as discovered from inspections in BMP 18 & 19.	2. Permit Year 1-5 as identified in BMP 18 & 19	2. Number and location of each priority area determined.
23.	Outfall Inspections			
	Establish procedure to perform regular dry weather inspections of outfalls to identify illicit discharges and connections.	1. Establish a Standard Operating Procedure under IDDE Program/ Plan BMP 21 for creating a schedule for dry weather outfall inspections	1. Permit Year 1 ;Continuous	1. Was the SOP completed: Y/N
		2. Implement SOP in BMP 23.1	2. Permit Year 1; Continuous	Date of inspection, number of inspections
24.	Illicit Discharge and Trace Sources			
	Establish procedures for investigating potential illicit discharges.	1. Create standard operating procedures for investigating potential illicit discharges.	1. Permit Year 1	1. Document created: Yes or No
		2. Maintain written IDDE Illicit Discharge program.	2. Permit Year 1; Continuous	2. Maintained: Yes or No
25.	IDDE Plan Enforcement and Documentation			
	Create and apply IDDE Plan to detect and address any illicit discharges violations identified.	1. Add violation remedies authorized by NC Statutes to the Plan for ordinance violations.	1. Permit Year 1	1. Added to IDDE Plan: Yes or No
		2. Identify priority areas having/ or likely to have discharges	2. Permit Year 1; Continuous	2. Number of areas identified
		3. Conduct dry weather inspections as established in BMP 23.1.	3. Permit Year 1; Continuous	3. Number of inspections
		4. Identify illicit discharges from BMP 23.1	4. Permit Year 1; Continuous	4. Number of actual illicit discharges identified.

Table 15: Illicit Discharge Detection and Elimination BMPs

		5. Eliminate the source of the illicit discharge	5. Permit Year 1; Continuous	5. Total number of enforcement actions.
26.	IDDE Program Evaluation			
	Annually review IDDE program	1. Annually review the IDDE Program with Planning Director, Public Works Director, and Street Supervisor	1. Permit Year 1; Continuous	1. Report any recommended changes
		2. Incorporate into annual meeting the number and location of violators	2. Continuous	2. Violation locations discussed: Yes or No
Permit Ref.	3.4.4: IDDE Tracking Measures for tracking and documenting the date(s) an illicit discharge, illicit connection or illegal dumping was observed, the results of the investigation, any follow-up of the investigation, the date the investigation was closed, the issuance of enforcement actions, and the ability to identify chronic violators.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
27.	Tracking IDDE Violations			
	A software will be needed to track IDDE violations and any actions taken on the violation. The software will track the location, the date of the discharge, the type, action, closure, actions, and will assist in identifying chronic violators	1. Develop another Illicit Discharge form for the public to report violations.	1. Permit Year 1	1. Created: Yes or No
		2. Develop fields in software to track violations including the location, the date of the discharge, the type, action, closure, and actions.	2. Permit Year 1	2. Developed: Yes or No
		3. Create ability in software to issue annual reports from software	3. Permit Year 1	3. Feature created: Yes or No
		4. Track violations including the location, the date of the discharge, the type, action, closure, and actions.	4. Continuous	4. Report number of violations from software

Table 15: Illicit Discharge Detection and Elimination BMPs

Permit Ref.	3.4.5: Staff IDDE Training Measures to provide training for municipal staff and contractors who, as part of their normal job responsibilities, may observe an illicit discharge, illicit connection, illegal dumping or spills. Training shall include how to identify and report illicit discharges, illicit connections, illegal dumping and spills. Each staff training event shall be documented, including the agenda/materials, date, and number of staff participating.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
28.	Staff IDDE Training			
	Training for Illicit Discharges, Illicit Connections, and Illegal Dumping	1. Incorporating training to municipal employees during Safety Committee Meetings.	1. Permit Year 1	1. Dates created for IDDE training in Safety Meeting: Y/N
		2. Develop information and training for employees at meeting	2. Permit Year 1	2. Were materials created and distributed: Yes or No
		3. Provide training opportunities at Safety Committee Meetings	3. Annual	3. Annual Safety Meeting training accomplished: Y/N
		4. Train Finance Department on receiving IDDE calls.	4. Permit Year 1	4. Report number of staff trained.
29.	Spills			
	Informing municipal staff of correct contact for spills (Fire Dept. handles spills in coordination with Catawba County Emergency Services)	1. Train front desk employees to direct spills to the Fire Dept.	1. Annually	1. Report number of staff trained
		2. Train public works employees to direct spills to the Fire Dept.	2. Annually	2. Were public works employees trained: Y/N
		3. Train police employees to direct spills to the Fire Dept.	3. Annually	3. Were police trained to direct spills to FD: Y/N
Permit Ref.	3.4.6: IDDE Reporting Measures for the public and staff to report illicit discharges, illegal dumping and spills. The mechanism shall be publicized to facilitate reporting and shall be managed to provide rapid response by appropriately trained personnel.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric

Table 15: Illicit Discharge Detection and Elimination BMPs

30.	IDDE Hotline Contact			
	Provide staff member to speak with public and staff about IDDE.	1. Designate staff member for illicit discharges who will be hotline contact.	1. Permit Year 1	1. Staff member designated: Y/N.
		2. Add IDDE Hotline contact information to flyers.	2. Permit Year 1	2. Report date flyer created.
		3. Add IDDE Hotline contact information to the webpage	3. Permit Year 2	3. Report date it was added
31.	Spill Record Keeping			
	Determine number of spill clean ups from Fire Dept.	1. Track total number of annual spill clean ups completed by the Fire Dept.	1. Annual	1. Report number of spill clean ups from Fire Chief

PART 8: CONSTRUCTION SITE RUNOFF CONTROL PROGRAM

In accordance with 15A NCAC 02H .0153, the Town of Maiden relies upon the North Carolina Sedimentation Pollution Control Act (SPCA) of 1973 and the NCG010000 permit for construction activities as qualifying alternative programs to meet the NPDES MS4 Permit requirements for all construction site runoff control measures to reduce pollutants in stormwater runoff from construction activities that result in land disturbance of greater than or equal to one acre and any construction activity that is part of a larger common plan of development that would disturb one acre or more.

Table 16: Qualifying Alternative Program Components for Construction Site Runoff Control Program

Permit Reference	State or Local Program Name	Legal Authority	Implementing Entity	Meets Whole or Part of Requirement
3.5.1 - 3.5.4	Catawba County Erosion Control & Sedimentation Control Delegated SPCA Program*	15A NCAC Chapter 04	Catawba County Erosion Control & Sedimentation Control	Whole

* The local delegated SPCA Program ordinance(s)/regulatory mechanism(s) can be found at:
https://library.municode.com/nc/catawba_county/codes/code_of_ordinances?nodeId=COOR_CH31SOERSECO

The Town of Maiden also implements the following BMPs to meet NPDES MS4 Permit requirements.

Table 17: Construction Site Runoff Control BMPs				
Permit Ref.	3.5.6: Public Input Measures to provide and promote a means for the public to notify the appropriate authorities of observed erosion and sedimentation problems.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
32.	Municipal Staff Training			
	Train municipal staff who receive calls from the public on the protocols for referral and tracking of construction site runoff control complaints.	1. Train municipal staff on proper handling of construction site runoff control complaints.	1. Annually beginning in Permit Year 1.	1. Report number of staff trained and training date(s)
		2.Train municipal staff to forward complaints to appropriate county department	2. Annually	2. Report date of training and number of staff.
Permit Ref.	3.5.5: Waste Management Measures to require construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impact to water quality.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
33.	Waste Management			
	Coordinate Strategies with Catawba County Erosion and Sedimentation Control	1. Establish baseline strategies with Catawba County for existing practices	1. Permit Year 1	1. Baseline strategy created: Yes/No

Table 17: Construction Site Runoff Control BMPs

		2. Create information for construction site operators on BMP for waste	2. Permit Year 2	2. Document created: Yes/ No

PART 9: POST-CONSTRUCTION SITE RUNOFF CONTROL PROGRAM

This SWMP identifies the minimum elements to develop, implement and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that are located within the Town of Maiden and discharge into the MS4. These elements are designed to minimize water quality impacts utilizing a combination of structural Stormwater Control Measures (SCMs) and/or non-structural BMPs appropriate for the community, and ensure adequate long-term operation and maintenance of SCMs.

In accordance with 15A NCAC 02H .0153 and .1017, the Town of Maiden implements the following State post-construction program requirements, which satisfy the NPDES Phase II MS4 post-construction site runoff control requirements as Qualifying Alternative Programs (QAPs) in the MS4 area(s) where they are implemented.

Table 18: Qualifying Alternative Program(s) for Post-Construction Site Runoff Control Program

State QAP Name	State Requirements	Local Ordinance / Regulatory Mechanism Reference
None	N/A	N/A

The Town of Maiden has existing requirements other than Qualifying Alternative Program(s) for implementation of the NPDES Phase II MS4 post-construction program requirements. These existing requirements are codified in local ordinance(s), and implementation is further defined in guidance, manuals and/or standard operating procedure(s) as summarized in Table 19 below.

Table 19: Summary of Existing Post-Construction Program Elements

Permit Requirements for Plan Review and Approval	Municipal Ordinance/Code Reference(s) and/or Document Title(s)	Date Adopted
3.6.2(a) Authority	Chapter 17 Appendix B-102	12/18/2007 (Ord. 36-2007)
3.6.3(a) & 15A NCAC 02H.0153(c) Federal, State & Local Projects	Not located in Ordinance	
3.6.3(b) Plan Review	Chapter 17 Appendix B-201	12/18/2007 (Ord. 36-2007)
3.6.3(c) O&M Agreement	Chapter 17 Appendix B-402	12/18/2007 (Ord. 36-2007)
3.6.3(d) O&M Plan	Town of Maiden Administrative Manual for Phase II Stormwater	April 1, 2009
3.6.3(e) Deed Restrictions/Covenants	Chapter 17 Appendix B-302(c)	12/18/2007 (Ord. 36-2007)
3.6.3(f) Access Easements	Chapter 17 Appendix B-408 & 306	12/18/2007 (Ord. 36-2007)
Permit Requirements for Inspections and Enforcement	Municipal Ordinance/Code Reference(s) and/or Document Title(s)	Date Adopted
3.6.2(b) Documentation	Chapter 17 Appendix B-202	12/18/2007 (Ord. 36-2007)
3.6.2(c) Right of Entry	Chapter 17 Appendix B-403	12/18/2007 (Ord. 36-2007)
3.6.4(a) Pre-CO Inspections	Chapter 17 Appendix B-203 (D)	12/18/2007 (Ord. 36-2007)
3.6.4(b) Compliance with Plans	Chapter 17 Appendix B-204 (A)	12/18/2007 (Ord. 36-2007)
3.6.4(c) Annual SCM Inspections	Chapter 17 Appendix B-401 (B)	12/18/2007 (Ord. 36-2007)
3.6.4(d) Low Density Inspections	Chapter 17 Appendix B-503 (B)	12/18/2007 (Ord. 36-2007)
3.6.4(e) Qualified Professional	Chapter 17 Appendix B-401 (B)	12/18/2007 (Ord. 36-2007)
Permit Requirements for Fecal Coliform Reduction	Municipal Ordinance/Code Reference(s) and/or Document Title(s)	Date Adopted
3.6.6(a) Pet Waste	Chapter 17 Appendix B-308 (A) (1)	12/18/2007 (Ord. 36-2007)
3.6.6(b) On-Site Domestic Wastewater Treatment	Chapter 17 Appendix B-309	12/18/2007 (Ord. 36-2007)

The annual reporting metrics for the post construction program are provided in Table 20: Post Construction Site Runoff Control BMPs below.

Table 20: Post Construction Site Runoff Control BMPs				
Permit Ref.	3.6.5(a), 3.6.5(b), and 4.1.3: Minimum Post-Construction Reporting Requirements Measures to document activities over the course of the fiscal year (July 1 – June 30) including appropriate information to accurately describe progress, status, and results.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
34.	Standard Reporting			
	Implement standardized tracking, documentation, inspections and reporting mechanisms to compile appropriate data for the annual self-assessment process. Data shall be provided for each Post-Construction/Qualifying Alternative Program being implemented as listed in Tables 18 and 19.	1. Track number of low density and high density plan reviews performed.	1. Continuously; Permit Years 1-5	1. Number of plan reviews performed for low density and high density.
		2. Track number of low density and high density plans approved.	2. Continuously; Permit Years 1-5	2. Number of plan approvals issued for low density and high density.
		3. Maintain a current inventory of low density projects and constructed SCMs including SCM type or low density acreage, location and last inspection date.	3. Continuously; Permit Years 1-5	3. Summary of number and type of SCMs added to the inventory; and number and acreage of low density projects constructed.
		4. Track number of SCM inspections performed.	4. Continuously; Permit Years 1-5	4. Number of SCM inspections.
		5. Track number of low density inspections performed.	5. Continuously; Permit Years 1-5	5. Number of low density inspections.
		6. Track number and type of enforcement actions taken.	6. Continuously; Permit Years 1-5	6. Number and type of enforcement actions taken.
Permit Ref.	3.6.2: Legal Authority Measures to maintain adequate legal authorities through ordinance or other regulatory mechanism to: (a) review designs and proposals for new development and redevelopment to determine whether adequate stormwater control measures will be installed, implemented, and maintained, (b) request information such as stormwater plans, inspection reports, monitoring results, and other information deemed necessary to evaluate compliance with the Post-Construction Stormwater Management Program, and (c) enter private property for the purpose of inspecting at reasonable times any facilities, equipment, practices, or operations related to stormwater discharges to determine whether there is compliance with the Post-Construction Stormwater Management Program.			
	A	B	C	D

Table 20: Post Construction Site Runoff Control BMPs

BMP No.	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
35.	Develop Legal Authority for Federal, State and Local Projects			
	Revise existing ordinance to specifically require compliance by Federal, State, and Local government projects and revise reference to stormwater design manual to specify NCDEQ Stormwater Design Manual.	1. Revise code to require Federal, State, and local government projects to comply with post construction requirements unless subject to its own NPDES MS4 permit or qualifying alternative program.	1. Permit Year 2	1. Report date adopted
Permit Ref.	3.6.3: Plan Review and Approval Measures to maintain plan review and approval authority, standards and procedures to: (a) Require Federal, State, and local government projects to comply with Post-Construction Program requirements throughout the entire MS4 permitted area, unless the entity is subject to its own NPDES MS4 permit or a qualifying alternative program, (b) Conduct site plan reviews of all new development and redeveloped sites that disturb greater than or equal to one acre, and sites that disturb less than one acre that are part of a larger common plan of development or sale for compliance with 15A NCAC 02H .1017 and the qualifying alternative programs that apply within your jurisdiction, (c) Ensure that each project has an Operation and Maintenance Agreement that complies with 15A NCAC 02H .1050(12), (d) Ensure that each project has an Operation and Maintenance Plan that complies with 15A NCAC 02H .1050(13), (e) Ensure that each project has recorded deed restrictions and protective covenants, that require the project to be maintained consistent with approved plans, and (f) Ensure that each SCM and associated maintenance accesses be protected in a permanent recorded easement per 15A NCAC 02H 1050 (9) and (10).			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
36.	Revise Existing Ordinance			
	Revise existing ordinance to specifically require compliance by Federal, State, and Local government projects and revise reference to stormwater design manual to specify NCDEQ Stormwater Design Manual.	1. Reference BMP 35	1. Reference BMP 35	1. Reference BMP 35

Table 20: Post Construction Site Runoff Control BMPs

Permit Ref.	3.6.4: Inspections and Enforcement Measures to maintain inspection and enforcement authority, standards and procedures to: (a) Conduct post-construction inspections prior to issuing a Certificate of Occupancy or a Temporary Certificate of Occupancy. Alternatively, the project owner may provide a surety bond to guarantee compliance with the approved plan(s), (b) Ensure that the project has been constructed in accordance with the approved plan(s), (c) Ensure annual inspection of each permitted SCM to ensure compliance with the approved Operation and Maintenance Agreement, (d) Ensure inspection of low density projects at least once during the permit term, and (e) Require that inspections be conducted by a qualified professional.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
37.	Maintenance of Post Construction SCMs			
	Improve legal authority requiring SCM maintenance and establish maintenance and agreements of SCMs with responsible parties	1. Review/Update ordinance to provide authority for inspections, enforcement, and O&M agreements.	1. Permit Year 1	1. Ordinance Updated: Y/N
		2. Develop and adopt a standard O&M agreement	2. Permit Year 1	2. O&M Agreement adopted: Y/N
		3. Execute O&M agreements for all permitted projects.	3. Permit Year 2-5	3. Number of new O&M agreements approved.
38.	Inspection and Enforcement			
	After completion of project, an inspection will be required before issuing a certificate of occupancy. After approval, annual inspections by a qualified professional are required.	1. Prior to issuance of a CO a qualified professional shall perform an inspection on all project SCMs to verify compliance. After inspection CO may be issued.	1. Continuous	1. Inspections reported: Y/N and number of inspections
		2. Verify that owner has had a qualified professional inspect SCM in accordance with DEQ SCM Manual and O&M Agreement.	2. Permit Year 2; Continuous	2. Number of inspection reports

Table 20: Post Construction Site Runoff Control BMPs

		3. Incorporate annual staff inspections of all SCMs	3. Permit Year 3; Continuous	3. Annual staff inspections complete: Y/N and number of inspections
39.	Inspection of Low Density Projects			
	Establish clearer legal authority for inspection of low-density projects at least once during the permit term and implement inspections	1. Establish clearer legal authority through code revisions.	1. Permit Year 2	1. Ordinance adopted: Y/N Report date adopted
		2. Conduct inspection of 20% of low-density projects each year	2. BMP 34.5	3. BMP 34.5
Permit Ref.	3.6.5 Documentation Measures to maintain adequate documentation and standardized inspection and tracking mechanisms to: (a) Maintain an inventory of post-construction SCMs and low-density projects, (b) Document, track, and maintain records of inspections and enforcement actions. Tracking shall include the ability to identify chronic violators, and (c) Make available to developers all relevant ordinances, post-construction requirements, design standards, checklists, and/or other materials.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
40.	Document post-construction SCM and low-density projects.			
	For the purpose of inspections and tracking: create an inventory of existing post construction SCMs and low-density projects	1. Establish list and mapping location of existing structural SCMs and low density projects.	Permit Year 2	Amount of SCMs and low density projects listed and mapped
		2. Notify owners of anticipated inspections	Permit Year 3	Owners contacted : Y/N and number
		3. Inspect SCMs and notify owner of results	Permit Year 3	Inspections completed number
41.	Track Inspections			
	Use software to track results of inspections and enforcement actions.	1. Incorporate inspection tracking software/process for tracking results of inspections and enforcement actions.	1. Permit Year 2	1. Tracking process implemented Y/N

Table 20: Post Construction Site Runoff Control BMPs

		2. Use tracking software to identify chronic violators	2. Permit Year 3	2. Number of chronic violators
42.	Education Materials for Developers			
	Provide Developers with Educational Materials	1. Incorporate into webpage: ordinances, post-construction requirements, design standards, and other relevant materials	1. Permit Year 1; Annually updated	Links added to webpage: Y/N Annual question of if update was needed: Y/N
Permit Ref.	3.6.6: Fecal Coliform Reduction Measures to control, to the maximum extent practicable, sources of fecal coliform per 15A NCAC 02H .1017(7). At a minimum, the program shall include: (a) A pet waste management component, which may be achieved by revising an existing litter ordinance, and (b) An on-site domestic wastewater treatment system component, if applicable, which may be coordinated with local county health department, to ensure proper operation and maintenance of such systems.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
43.	This permit requirement is fully met by the existing post-construction program, see references provided in Table 19.			
	Pet Waste	1.	1.	1.
		2.	2.	2.
		3.	3.	3.
		4.	4.	4.
		5.	5.	5.
44.	This permit requirement is fully met by the existing post-construction program, see references provided in Table 19.			
	On-site domestic wastewater system handled by Catawba County	1.	1.	1.
		2.	2.	2.
		3.	3.	3.
		4.	4.	4.
		5.	5.	5.

PART 10: POLLUTION PREVENTION AND GOOD HOUSEKEEPING PROGRAMS

This SWMP provides a comprehensive pollution prevention and good housekeeping strategy for the Town of Maiden municipal facilities and operations. Pollution prevention and good housekeeping is accomplished through the implementation of seven required programs, which collectively address the ultimate goal of preventing or reducing pollutant runoff from municipal operations such as parks and open space maintenance, fleet and building maintenance, new construction and land disturbances, and municipal storm sewer system maintenance.

Pollution prevention and good housekeeping for municipal operations includes the following programs:

1. Municipal Facilities Operation and Maintenance Program
2. Spill Response Program
3. MS4 Operation and Maintenance Program
4. Municipal SCM Operation and Maintenance Program
5. Pesticide, Herbicide and Fertilizer Management Program
6. Vehicle and Equipment Maintenance Program
7. Pavement Management Program

Currently, the Maiden Fire Department handles spill responses and this is done in conjunction with Catawba County Emergency Services. The Town of Maiden does not have a street sweeper but provides leaf collection, brush collection, and curbside removal of certain solid waste. The Town of Maiden will quantify these measurements of pick up. The Town of Maiden will manage, implement and report the pollution prevention and good housekeeping BMPs as specified in Table 21 below for each required program.

Table 21: Pollution Prevention and Good Housekeeping BMPs

Permit Ref.	3.7.1: Municipal Facilities Operation and Maintenance Program Measures to manage facilities that are owned and operated by the permittee and have the potential for generating polluted stormwater runoff. The permittee shall maintain a current inventory of municipal facilities; perform facility inspections and routine maintenance; establish specific frequencies, schedules, and standard documentation; provide staff training on general stormwater awareness and implementing pollution prevention and good housekeeping practices.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
45.	Facility Inventory			
	Maintain up to date inventory of municipal facilities with potential to generate polluted runoff.	1. Compile list of municipal facilities to add additional buildings	1. Permit Year 1	1. Number of facilities inventoried

Table 21: Pollution Prevention and Good Housekeeping BMPs

		2. Perform and document inspection of each facility noting any runoff or potential to generate runoff or needing spill response procedures. Include in each documented inspection, each facilities classification as high or low potential for polluted runoff.	2. Permit Year 1	2. Number of facilities inspected.
		3. Create SPCC for each facility that contains spill hazards	3. Permit Year 3-4	3. Number of SPCC Plans created
		4. Determine which facilities have NPDES Industrial Permits	4. Year 1	4. Number of facilities
		5. Update inventory annually as new facilities are built or demolished	5. Annual	5. Number of facilities added or removed.
46.	Develop Municipal Facilities Operation & Maintenance Plan			
	Create O&M Plan Template to define the expectations of the municipal facilities which are subject to stormwater/ MS4 regulations. Each facility shall have an O & M Plan based on this template but changed to the increased determination of polluted runoff.	1. Develop O & M Plan Template. The plan will outline the required procedures for facilities addressing inspections, required maintenance, training, pollution prevention, and housekeeping practices.	1. Permit Year 1	1. O & M Template developed: Y/N
		2. Tailor O&M plan to each facility, increasing requirements when determined to be at increased risk for polluted runoff based on inspection in BMP 45.2	2. Permit Year 1-2	2. Number of O&M Plans created
		3. Create self- inspection documents for each O&M facility.	3. Permit Year 1-2	3. Number of self-inspection documents created
		4. Adopt O&M Plan for each facility	Permit Year 1	4. O&M Plans adopted
		5. Administer the O&M Plan created for each facility as created by BMP 46.2	5. Permit Year 2-3; Annually/Continuous	5. Number of facilities inspected

Table 21: Pollution Prevention and Good Housekeeping BMPs

		6. Report number of items needing corrections during inspection	6. Continuous	6. Number of items needing correction
		7. Report items corrected from BMP 46.5	7. Continuous	7. Report number of items corrected.
47.	Municipal Facilities			
	The Municipal O&M Template and Plan for each facility will be designed to make sure facilities are not adversely impacting the MS4 waters. The facilities will need to be maintained regularly and inspected regularly. Ensure staff are trained.	1. Determine if any facilities need to be added to the list. BMP 46.	1. Permit Year 1	1. Are all facilities included in list: Y/N
		2. Create standard documentation for inspecting all facilities BMP 46.2	2. Permit Year 1	2. Document created: Y/N; Number of facilities with potential for polluted run-off.
		3. Inspect Facilities and document inspection to verify that each are performing good housekeeping measures	3. Permit Year 1; Continuous	3. Number of facilities inspected.
		4. Document and correct issues found during inspections. Reference BMP 46.5 and 46.6	4. See BMP 46.5 and 46.6	4. See BMP 46.5 and 46.6
		5. Develop or identify a staff training program for general stormwater pollution prevention and provide to employees.	5. Permit Year 2	5. Report training program developed: Y/N
		6. Meet with staff & provide training program to staff	6. Annually	6. Training covered with departments on a specified date: Y/N

Table 21: Pollution Prevention and Good Housekeeping BMPs

Permit Ref.	3.7.2: Spill Response Program Measures for facilities and operations that store and/or use materials that have the potential to contaminate stormwater runoff if spilled. The permittee shall maintain written spill response procedures and train staff on spill response procedures.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
48.	Spill Response			
	Spill response program for facilities that use materials that could enter the MS4 waters. Create program to track facilities that have these materials and have clear designated responses to spills at facilities.	1. Develop Spill Response procedure in coordination with O&M Plan creation in BMP 46 for each facility.	1. Permit Year 1	1. Procedures created: Y/N
		2. Maintain spill response procedures. Update as issues are noted.	2. Annually	2. Number of updates
		3. Train staff on spill response procedures	3. Annually	3. Report number of staff trained and number of facilities
		4. Respond to spills as outlined in created spill response procedure BMP 37.1 and document spill.	4. Annually	4. Number of spills
49.	Emergency Personnel have spill cleanup kits			
	Coordinate with Fire Chief to determine emergency personnel have access to spill kits	1. Fire Dept. must have at least 10 spill kits available.	1. Permit Year 1 and Annually	1. How many spill kits are available for Fire Dept.
Permit Ref.	3.7.3: MS4 Operation and Maintenance Program Measures to minimize pollutants in the stormwater collection system. The permittee shall provide operation and maintenance staff training on stormwater awareness and pollution prevention, perform MS4 inspections, maintain the collection system including catch basins and conveyances; and establish specific frequencies, schedules, and standard documentation.			
	A	B	C	D

Table 21: Pollution Prevention and Good Housekeeping BMPs

BMP No.	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
50.	MS4 Operation and Maintenance Program			
	An O & M Program must be developed and maintained. The O&M Plan must be submitted and approved by DEQ.	1. Develop O&M program to define required procedures to perform inspections, maintenance and evaluation of the stormwater system.	1. Permit Year 1	1. Was the O&M created: Y/N
		2. Submit the developed O&M program to DEQ for approval	2. Permit Year 1	2. Was the program approved: Y/N
		3. Receive approval from DEQ	3. Permit Year 1	3. Report date submitted to DEQ
		4. Adopt O & M Program	4. Permit Year 1	4. Adopted: Y/N, date
		5. Administer the O & M Program	5. Continuously	5. Number of MS4 inspections completed and number of corrections
51.	MS4 Training			
	Provide MS4 training to municipal staff to minimize pollutants in the stormwater collection system and prevent damage to the system.	1. Develop or identify a staff training program for MS4 maintaining and cleaning.	1. Year 1	1. Developed: Y/N
		2. Meet with staff & provide training program to staff	2. Annually	2. Training covered with departments on a specified date: Y/N
52.	MS4 Inspection and Maintenance	1. Develop a standard operating procedure (SOP) that includes proactive inspection schedules, documentation, and maintenance of MS4 infrastructure.	1. Permit Year 1	SOP Completed: Y/N
		2. Perform regular inspections in accordance with the SOP.	2. Annual; following specific schedule created by BMP 52.1 and 52.4 created for tracking	2. Number of inspections documented
		3. Verify, document, and prioritize maintenance activities identified by inspections or complaints.	3. Continuously	3. Number of maintenance activities performed

Table 21: Pollution Prevention and Good Housekeeping BMPs

		4. Develop an inspection and maintenance tracking system to be used in accordance with the SOP and to identify locations for system maintenance.	Permit Year 2	Tracking System Developed: Y/N
Permit Ref.	3.7.4: Municipal SCM Operation and Maintenance Program Measures to manage municipally-owned, operated, and/or maintained structural SCMs that are installed for compliance with the permittee's post-construction program. The permittee shall maintain a current inventory of SCMs, perform SCM inspections and maintenance, and shall establish specific frequencies, schedules, and documentation.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
53.	Municipal SCMs Operation and Maintenance Plan			
	Develop Plan for Municipal SCMs that requires inventory of SCMs, dictates inspection and maintenance frequency and schedules.	1. Develop an SCM O&M plan that defines specific SCM procedures to inspect, maintain and evaluate the structures.	1. Year 1.	1. Was the SCM O&M developed: Y/N
		2. Submit to DEQ for approval	2. Year 1	2. Was the SCM O&M submitted: Y/N, date
		3. Receive approval from DEQ	3. Year 1	3. Was approval received: Y/N, date
		4. Adopt SCM O&M Plan	4. Year 1	4. Adopted: Y/N date
		5. Administer the approved SCM O&M.	5. Continuous	5. Number of municipal SCMs inspected
54.	Municipal SCMs			
	Municipal SCM O&M plan will dictate maintenance of SCM structures to ensure they do not negatively impact the MS4. The SCMs will be maintained in a manner defined by the O&M plan and BMP Manual	1. Verify and document locations of municipal SCMs. Use town/county records to determine SCM ownership.	1. Permit Year 1	1. SCM list complete: Y/N
		2. Maintain inventory of municipally owned SCMs. Add new SCMs as constructed.	2. Continuous	2. Number of SCMs added with type of each SCM, date, location documented
		3. Perform annual inspection and maintenance of municipally owned SCMs to verify the operation and maintenance agreement is being followed	3. Annually	3. Number of SCMs inspected

Table 21: Pollution Prevention and Good Housekeeping BMPs

		4. Document and correct issues found during inspections.	4. Annually	4. Number of issues identified; number of issues corrected.
		5. Train municipal staff on SCM housekeeping	5. Annually	5. Document and report number of staff trained, training dates and topics.
Permit Ref.	3.7.5: Pesticide, Herbicide and Fertilizer Management Program Measures to minimize water quality impacts from the use of landscape chemicals. The permittee shall provide routine pollution prevention and chemical use, storage and handling training, and shall ensure compliance with permits and applicator certifications.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
55.	Training on Pesticide, Herbicide Management & Licensing			
	Street Supervisor Continuous Training	1. Street Supervisor training has to be completed every 5 years to stay licensed	1. Once during Permit Year 1-5	1. Training completed: Y/N, date
56.	Annual Inspections			
	Street Supervisor developing document for inspection of materials and completing inspection	1. Record items Street Supervisor observed during state inspection of pesticide and herbicide management and determine best practices to self-inspect	1. Permit Year 1	1. Number of items noted; Number of items resolved
		2. Develop document to annually self-inspect materials, storage and handling.	2. Permit Year 2	2. Was spreadsheet created Y/N
		3. Annually Inspect materials, storage and handling using created document	3. Permit Year 2 & Continuous	3. Inspected: Y/N

Table 21: Pollution Prevention and Good Housekeeping BMPs

Permit Ref.	3.7.6: Vehicle and Equipment Maintenance Program Measures to prevent and minimize contamination of stormwater runoff from areas used for municipal vehicle and equipment maintenance and/or cleaning. The permittee shall ensure that municipal industrial facilities subject to NPDES industrial permitting comply with those permit requirements, provide routine pollution prevention training to staff, perform routine inspections, and establish specific frequencies, schedules, and documentation.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
57.	Vehicle Cleaning			
	Ensure vehicle cleaning takes place in washing bays	1. Instruct employees to wash vehicles in washing bays.	1. Annually	1. Discussed with employees: Y/N
58.	Inspections			
	During facility inspections for Good Housekeeping and Runoff, Review areas around garage for pollutants.	1. Train staff on oil spill and clean up procedures	1. Annually	1. Number of staff trained
		2. Inspect if spill kits are available at Vehicle Maintenance areas	2. Annually	2. Spill kit available Y/N
		3. Review parking lot during wet weather event for oil sheen.	3. Annually	3. Oil Sheen documented Y/N
Permit Ref.	3.7.7: Pavement Management Program Measures to reduce pollutants in stormwater runoff from municipally-owned streets, roads, and parking lots within the permittee's corporate limits. The permittee shall implement measures to control litter, leaves, debris, particulate and fluid pollutants associated with vehicles, and establish specific frequencies, schedules, and documentation.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
59.	Leaf Collection & Shrub Collection			
	Collect leaf and shrub clippings	1. Publicize leaf collection times	1. Annually	1. Publicized by flyer, website, and town hall: Y/N
		2. Collect leaves and shrub clippings	2. Annually	2. Record tonnage of leaves collected

Table 21: Pollution Prevention and Good Housekeeping BMPs

60.	Vehicle Pollutant Management			
	Ensure that pollutants and vehicle leaks from wrecks are cleaned quickly	1. Verify that spill kits are available to the fire department via BMP 29.	1. See BMP 29	1. See BMP 29

Appendix A

Town Limits Map